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| APPLICATION NO.                                      | FILING DATE     | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |
|--|-----------------|----------------------|-------------------------|------------------|
| 10/629,671   | 07/30/2003      | Hee Bok Kang         | 40296-0005              | 6501             |
| 26633  | 7590 08/31/2004 |                      | EXAM                    | INER             |
| HELLER EHRMAN WHITE & MCAULIFFE LLP 1666 K STREET,NW |                 |                      | NGUYEN, VAN THU T       |                  |
| SUITE 300  | 21,14 **        |                      | ART UNIT                | PAPER NUMBER     |
| WASHINGTON, DC 20006                                 |                 |                      | 2824                    |                  |
|  |                 |                      | DATE MAILED: 08/31/2004 | 4                |

Please find below and/or attached an Office communication concerning this application or proceeding.

|   | Application No.   | Applicant(s)  |  |  |  |  |
|---|---|---------------|--|--|--|--|
| Office Astion Commence  | 10/629,671  | KANG, HEE BOK |  |  |  |  |
| Office Action Summary   | Examiner  | Art Unit      |  |  |  |  |
|   | VanThu Nguyen   | 2824          |  |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply  |   |               |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |   |               |  |  |  |  |
| Status  |   |               |  |  |  |  |
| 1) Responsive to communication(s) filed on  |   |               |  |  |  |  |
| 2a) ☐ This action is <b>FINAL</b> . 2b) ☐ This  | This action is <b>FINAL</b> . 2b) This action is non-final.   |               |  |  |  |  |
| · · · · · · · · · · · · · · · · · · ·   | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is |               |  |  |  |  |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.   |   |               |  |  |  |  |
| Disposition of Claims   |   |               |  |  |  |  |
| 4)⊠ Claim(s) <u>1-16,18 and 19</u> is/are pending in the application.   |   |               |  |  |  |  |
| 4a) Of the above claim(s) is/are withdrawn from consideration.  |   |               |  |  |  |  |
| 5) Claim(s) is/are allowed.   |   |               |  |  |  |  |
| 6) Claim(s) is/are rejected.  | 6) Claim(s) is/are rejected.  |               |  |  |  |  |
| <u> </u>  | 7) Claim(s) is/are objected to.   |               |  |  |  |  |
| 8)⊠ Claim(s) <u>1-16,18-19</u> are subject to restriction and/or election requirement.  |   |               |  |  |  |  |
| Application Papers  |   |               |  |  |  |  |
| 9)☐ The specification is objected to by the Examine   | •   |               |  |  |  |  |
| 10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.   |   |               |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |   |               |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  |   |               |  |  |  |  |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  |   |               |  |  |  |  |
| Priority under 35 U.S.C. § 119  |   |               |  |  |  |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage</li> </ul>  |   |               |  |  |  |  |
| application from the International Bureau (PCT Rule 17.2(a)).   |   |               |  |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.  |   |               |  |  |  |  |
|   |   |               |  |  |  |  |
|   |   | 4 /1          |  |  |  |  |
| Attachment(s)   |   |               |  |  |  |  |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 4) Interview Summary (PTO-413) Paper No(s)/Mail Date.   |               |  |  |  |  |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date  | 5) Notice of Informal Pa  |               |  |  |  |  |

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## Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- Claims 1 and 10, drawn to parallel read/write, classified in class 365, subclass
   220.
- II. Claims 2 and 11, drawn to serial read/write, classified in class 365, subclass 221.
- III. Claims 3-4, 12, 14, drawn to parallel read/write, classified in class 365, subclass 220.
- IV. Claims 5-9, 13, 15, 16, 18, drawn to signals, classified in class 365, subclass 191.
- V. Claim 19, drawn to signals, classified in class 365, subclass 191.

The inventions are distinct, each from the other because of the following reasons:

- 2. Inventions I and III are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention III has separate utility such as it requires one sense amplifier array. See MPEP § 806.05(d).
- 3. Inventions IV and V are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention V has separate utility such as it requires the least significant bit coupled to one of the plurality of I/O ports. See MPEP § 806.05(d).
- 4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification and field of search, restriction for examination purposes as indicated is proper.

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5. Applicant is advised that the reply to this requirement to be complete must include an

election of the invention to be examined even though the requirement be traversed (37 CFR

1.143).

6. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to VanThu Nguyen whose telephone number is (571) 272-1881.

The examiner can normally be reached on Monday-Friday, 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Richard Elms can be reached on (571) 272-1869. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thungm VanThu Nguyen

Primary Examiner

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